



Use Attainability Analysis

for

WBID 3425 Hogan's Fork

Submitted by
BWR

July 11, 2007

Submitted to:
Missouri Department of Natural Resources
Division of Environmental Quality
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

I. Water Body Information (For water body being surveyed)

Water Body Name (from USGS 7.5' quad):	Hogan's Fork
Missouri Water Body Identification (WBID) Number:	3425
8-digit HUC: 10300104	County: Johnson
Upstream Legal Description (from Table H):	17, 44N, 26W
Downstream Legal Description (from Table H):	Mouth
Number of sites evaluated	3
List all sites numbers, listed consequently upstream to downstream:	3, 2, 1

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest.

II. Subsegmentation (fill this section out only in cases where subsegmentation is being proposed)

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Upstream Coordinates:		Downstream Coordinates:	
UTM X	Y	UTM X	Y
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			
HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality:		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____	
EPE	± <u>24</u> Feet or ± _____ Meters	_____	
PDOP		± _____ Feet or ± _____ Meters	

III. Discharger Facility Information (list all permitted dischargers on the stream)

Discharger Facility Name(s):
Camp Palestine WWTF
Discharger Permit Number(s):
MO 0116550

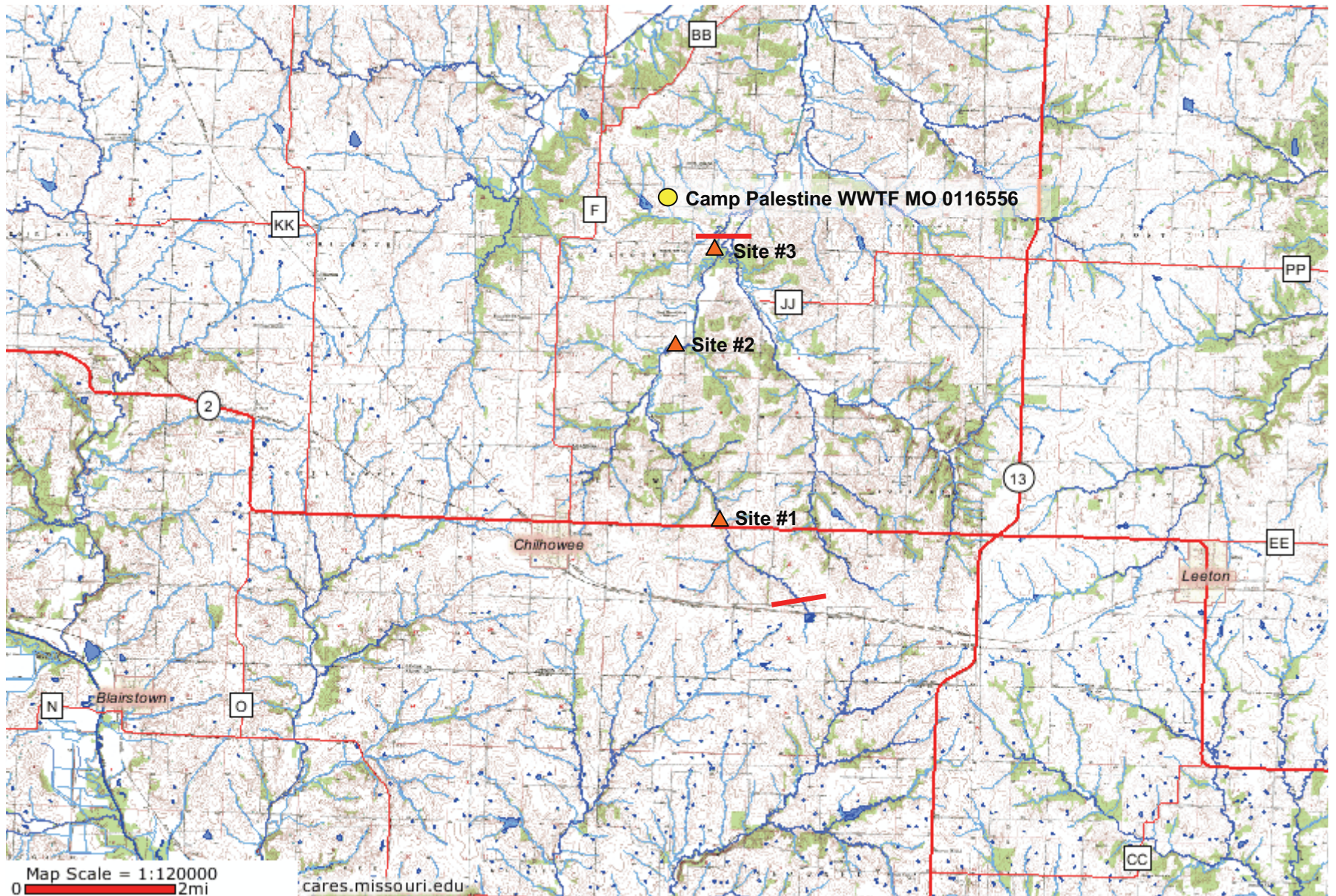
IV. UAA Surveyor (please print legibly)

Name of Surveyor	Alex B. Miller Alan Mitchell	Telephone Number:	(816) 310-3269
Organization/Employer:	BWR EAE		(913) 620-4380
Position:	Scientist		

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Signed: Alan Mitchell

Date: May 21, 2007



WBID# 3425
 Site# /

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: <u>5/21/2007</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ HWY 2 (E. OF CHILHOWEE)</u>
Personnel (Data Collectors): <u>Alex Mitchell</u> <u>Alex Bartlett</u>	
Current Weather Conditions: <u>Clear</u>	Facility Name: <u>CAMP ROBERTA WHITE</u>
Weather Conditions for Past 10 days: <u>den</u>	Permit Number: <u>MD 01105510</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>93.815047W</u>	Y: <u>38.59484°N</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>100-0003</u> <u>100-0004</u>		<u>100-0001</u> <u>100-0002</u>			

Uses Observed*: (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Comments:

Indications of Human Use*: (attach photos)

<input type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Other:	

Comments:

70 Channel Feature
 RUN: 70%
 RIFFLE: 18%
 POOL: 12%

* Page Two – Data Sheet B for WBID # 3425 :
 Stream Morphology:

Site 1

Upstream View's Physical Dimensions: Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN	0	5	100	0.2	0.3
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN	0	6	100	0.5	0.7
POOL					

Substrate*: (These values should add up to 100%.)

% Cobble	% Gravel	% Sand	10	% Silt	90	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

Spore macrophytes

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Surveyor's Signature: Alan V. Mitchell Date of Survey: May 21, 2007

Organization: FAE, Inc. Position: Env. Eng.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3425 #1

	Distance from Stream edge	Depth	Rank	Assigned Rank (Riffle, Run, or Pool?)	Sorted depth
T _A	1 Wetted width =	<0.1		1	
	2 2.5 m	0.1		2	
	3	0.1		3	
	4	0.1		4	DO = 8.23 ppm,
	5 interval	0.2		5	86.2 %
	6 0.2 m	0.2		6	17.2 °C
	7	0.1		7	
	8	0.1		8	
	9	0.1		9	
	10	0.1		10	
T _B	1 Wetted width	<0.1		11	DO READING
	2 4.0 m	0.1		12	8.16 ppm
	3 interval	0.2		13	88.3 %
	4 0.2 m	0.2		14	17.1 °C
	5	0.3		15	
	6	0.3		16	
	7	0.2		17	
	8	0.2		18	
	9	0.2		19	
	10	<0.1		20	
T _C	1 Wetted width	<0.1		21	DO READING
	2 3.0 m	0.1		22	7.13 ppm
	3 interval	0.1		23	77.2 %
	4 0.3 m	0.1		24	17.1 °C
	5	0.1		25	
	6	0.1		26	
	7	0.2			
	8	0.1			
	9	0.1			
	10	<0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Alan W. WhitelyDate: May 21, 2007Organization: BAE Inc.Position: Env. Eng.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3/1/05 #11

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _D	Wetted Width	<0.1		1 DO READINGS	
	3.0 m	0.1		2 7.51	POOL
	Interval	0.1		3 82.7	9%
	0.3 m	0.2		4 17.1	0%
		0.2		5	
		0.2		6 RUN	
		0.2		7	
		0.2		8	
		0.2		9	
		<0.1		10	
T _E	Wetted Width	<0.1		11 DO READINGS	
	7.0 m	<0.1		12 7.20	POOL
	Interval	<0.1		13 84.4	9%
	0.7 m	<0.1		14 17.0	0%
		<0.1		15 RUN	
		<0.1		16	
		<0.1		17	
		<0.1		18	
		0.1		19	
		<0.1		20	
T _F	Wetted Width	<0.1		21 DO READINGS	
	5.0 m	0.2		22 6.61	POOL
	Interval	0.3		23 71.4	9%
	0.5 m	0.4		24 17.1	0%
		0.3		25	
		0.3		26 POOL	
		0.3		.	
		0.2		.	
		0.1		.	
		0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Andrew S. MillerDate: Mar. 21, 2007Organization: EAE, Inc.Position: Env. Eng.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3425 #1

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	1 Wetted Width	0.1		1 DO READING	
	2 4.0 m	0.2		2 6.50	FOUL
	3 Interval	0.1		3 70.2	2.5
	4	0.1		4 17.2	1.5
	5	0.1		5	
	6	0.1		6 RUN	
	7	0.1		7	
	8	0.2		8	
	9	0.1		9	
	10	<0.1		10	
T _H	1 Wetted Width	<0.1		11 DO READING	
	2 7.5 m	0.3		12 6.23	2.5
	3 Interval	0.4		13 68.4	2.5
	4 0.7 m	0.4		14 7.0	1.5
	5	0.3		15	
	6	0.3		16 FOUL	
	7	0.3		17	
	8	0.3		18	
	9	0.3		19	
	10	<0.1		20	
T _I	1 Wetted Width	<0.1		21 DO READING	
	2 5.5 m	0.2		22 6.91	2.5
	3 Interval	0.4		23 68.4	2.5
	4 0.5 m	0.4		24 17.1	1.5
	5	0.3		25	
	6	0.3		26 FOUL	
	7	0.3		.	
	8	0.3		.	
	9	0.3		.	
	10	<0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Alan V. MitchellDate: May 21, 2007Organization: EHE, Inc.Position: Env. Engr

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3400 = 1

T_J

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	WETTED WIDTH	<0.1		1	DO READING
2	8.5 m	<0.1		2	6.98
3	Interval	<0.1		3	73.3
4	0.4 m	<0.1		4	17.2
5		0.1		5	
6		0.1		6	RUN
7		<0.1		7	
8		<0.1		8	
9		<0.1		9	
10		<0.1		10	
1	Wetted Width	<0.1		11	DO
2	2.0 m	<0.1		12	6.46
3	Interval	0.1		13	69.6
4	0.2 m	0.1		14	17.2
5		0.1		15	
6		0.1		16	
7		0.1		17	RUN
8		0.1		18	
9		0.1		19	
10		<0.1		20	
				21	
				22	
				23	
				24	
				25	
				26	
				.	
				.	
				.	
				n	
				.	
				.	

T_K

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Alan D. MitchellDate: May 22, 2007Organization: EAE, Inc.Position: Site Engineer

WBID# 3425
 Site# 2

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: <u>10:30am 5/21/2007</u>	Site Location Description (e.g., road crossing): <u>BRIDGE @ SW 401st RD</u>
Personnel (Data Collectors): <u>Allye Mitchell</u>	
Current Weather Conditions: <u>Clear</u>	Facility Name: <u>CAMP BUCKING WOLF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>NO DNR 550</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>93.82417°W</u>	Y: <u>38.60529°N</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____ ± _____ Feet or ± _____ Meters
EPE ± _____ Feet or ± _____ Meters	
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>6, 7, 8</u>		<u>5, 9, 10</u>			

Uses Observed*: (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Comments:

Indications of Human Use*: (attach photos)

<input type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Other:	

Comments:

*** Page Two – Data Sheet B for WBID # 3425 :**
Stream Morphology:

site 2

76 Channel Feature
 RUN: 85%
 RIFFLE: 09%
 POOL: 15%

Upstream View's Physical Dimensions: Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE	30	2	30	0.1	0.2
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN	0	6	100	0.2	0.4
POOL					

Substrate*: (These values should add up to 100%.)

% Cobble	50	% Gravel	50	% Sand		% Silt		% Mud/Clay		% Bedrock	
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Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

None

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Surveyor's Signature: Kristen Motell Date of Survey: May 21, 2007

Organization: EPA, Inc. Position: Env. Eng.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3425 BL

	Distance from Stream edge	Depth	Rank	Assigned Rank (Riffle, Run, or Pool?)	Sorted depth
T _A	Wetted width =	<0.1		1	
	4.5 m	<0.1		2	
	0.4	0.1		3	
		0.2		4	DO = 7.02 ppm,
		0.3		5	7.0
		0.3		6	17.4 °C
		0.2		7	
		0.2		8	
		0.1		9	
		<0.1		10	
T _B	Wetted Width	<0.1		11	DO
	7.5 m	0.3		12	7.19
	Interval	0.3		13	76.10
	0.7 m	0.2		14	17.3
		0.1		15	
		0.1		16	
		<0.1		17	
		<0.1		18	
		<0.1		19	
		0.1		20	
T _C	Wetted Width	<0.1		21	7.0
	4.5 m	0.2		22	7.19
	Interval	0.3		23	76.4
	0.4 m	0.4		24	16.9
		0.5		25	
		0.4		26	
		0.4		.	
		0.4		.	
		0.3		.	
		<0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

ed: John H. Mitchell Date: May 21, 2007

Organization: EHE, Inc. Position: Env. Eng.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3400 ft

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	Wetted Width	<0.1		1 DO	
2	5.0 m	0.2		2 7.36	run 1/2
3	Interval	0.3		3 78.6	0%
4	0.5 m	0.5		4 17.0	0%
5		0.5		5	
6		0.5		6 POOL	
7		0.4		7	
8		0.3		8	
9		0.2		9	
10		<0.1		10	
1	Wetted Width	<0.1		11 DO	
2	2.0 m	<0.1		12 7.54	run 1/2
3		0.1		13 78.2	0%
4		0.2		14 17.5	0%
5		0.2		15 RUN	
6		0.2		16	
7		0.2		17	
8		0.1		18	
9		0.1		19	
10		<0.1		20	
1	Wetted Width	<0.1		21 DO	
2	4.0 m	<0.1		22 7.47	run 1/2
3	Interval	0.1		23 78.1	0%
4	0.4 m	0.3		24 17.1	0%
5		0.3		25 RUN	
6		0.3		26	
7		0.2		.	
8		0.2		.	
9		0.2		.	
10		<0.1		n	
				.	
				.	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Chris H. McFaddenDate: 4/11/2007Organization: EAH, IncPosition: Env. Eng.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

345 ft

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	Wetted Width	<0.1		1 DO	
	3.0 m	<0.1		2 7.45	FLM
	Interval	0.2		3 7.0	FLM
	0.4 m	0.2		4 17.2	FLM
		0.3		5	
		0.3		6 RUN	
		0.3		7	
		0.2		8	
		0.2		9	
		0.2		10	
T _H	Wetted Width	<0.1		11 DO	
	4.0 m	0.2		12 7.4	FLM
	Interval	0.4		13 79.3	FLM
	0.4 m	0.4		14 17.1	FLM
		0.5		15	
		0.5		16 RUN	
		0.4		17	
		0.3		18	
		0.2		19	
		0.1		20	
T _I	Wetted Width	<0.1		21 DO	
	6.0 m	0.1		22 7.5	FLM
	Interval	0.1		23 79.6	FLM
	0.6 m	0.2		24 17.3	FLM
		0.3		25	
		0.4		26 POOL	
		0.5		.	
		0.4		.	
		0.3		.	
		<0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Shane W. WhitwellDate: May 21, 2007Organization: EHE, Inc.Position: Env. Engineer

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

34.5" SW

T_J

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	Wetted Width	<0.1		1 DO	
2	2.0 m	<0.1		2 7.67	
3	Interval	<0.1		3 81.8	ppm
4	0.2 m	<0.1		4 17.5	°C
5		0.1		5	
6		0.1		6 RUN	
7		0.1		7	
8		0.1		8	
9		0.1		9	
10		<0.1		10	
1	Wetted Width	0.1		11 DO	
2	4.0 m	0.2		12 7.75	ppm
3	Interval	0.3		13 81.4	°C
4	0.4 m	0.3		14 17.5	°C
5		0.3		15	
6		0.3		16 RUN	
7		0.2		17	
8		0.2		18	
9		0.1		19	
10		<0.1		20	
				21	
				22	
				23	
				24	
				25	
				26	
				.	
				.	
				.	
				n	
				.	
				.	

T_K

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Alan H. McFaddenDate: May 21, 2007Organization: EAE, Inc.Position: Env. Eng.

WBID# 3425
 Site# 8

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
 (must be completed for each site)

Date & Time: <u>5/21/07</u>	Site Location Description (e.g., road crossing): <u>BRIDGE CROSSING @ 800th RD</u>
Personnel (Data Collectors): <u>ALAN MITCHELL</u> <u>AMY BARTON</u>	
Current Weather Conditions:	Facility Name: <u>CAMP BALSINE WOLF</u>
Weather Conditions for Past 10 days:	Permit Number: <u>MD 0116550</u>
Drought Conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)	
Site GPS Coordinates: UTM X: <u>93-82861°W</u>	Y: <u>38-62571°N</u>
HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.):	
Global Positioning System (GPS)	Interpolation
Static Mode	Topographic Map or DRG
Dynamic Mode (Kinematic)	Aerial Photograph or DOQQ
Precise Positioning Service	Satellite Imagery
Signal Averaging	Interpolation Other
Real Time Differential Processing	
HORIZONTAL ACCURACY ESTIMATE	
GPS Data Quality	Interpolation Data Quality
FOM ± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____
EPE ± _____ Feet or ± _____ Meters	± _____ Feet or ± _____ Meters
PDOP	

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
<u>11&12</u>		<u>13&14</u>			

Uses Observed*: (Uses actually observed at time of survey.)

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Comments:

Indications of Human Use*: (attach photos)

<input type="checkbox"/> Roads	<input type="checkbox"/> Rope swings	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Other:	

Comments: No evidence of human use

70 Channel Feature
 RUN: 100%
 RIFFLE: 0%
 POOL: 0%

* Page Two – Data Sheet B for WBID # 3425:
 Stream Morphology: SITE 3

Upstream View's Physical Dimensions: Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN	0	10	40	0.5	0.1
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? ☒ Yes ☐ No

If so, is there an obvious current? ☒ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN	0	10	100	0.5	0.5
POOL					

Substrate*: (These values should add up to 100%.)

5 % Cobble	% Gravel	% Sand	% Silt	95 % Mud/Clay	% Bedrock
------------	----------	--------	--------	---------------	-----------

Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

None

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Surveyor's Signature: [Signature] Date of Survey: May 21, 2007
 Organization: EAE, Inc. Position: Field Technician

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3478 #9

	Distance from Stream edge	Depth	Rank	Assigned Rank (Riffle, Run, or Pool?)	Sorted depth
T _A	Wetted width =	<0.1		1	
	8.0 m	0.2		2	
		0.2		3	
	Interval	0.2		4	DO = 8.73 ppm,
	0.3 m	0.2		5	91.7 %
		0.3		6	18.6 °C
		0.3		7	
		0.2		8	Run
		0.1		9	
		<0.1		10	
T _B	Wetted width	<0.1		11	DO
	3.5 m	<0.1		12	8.67 ppm
	Interval	0.2		13	91.8 %
	0.3	0.2		14	18.4 °C
		0.3		15	
		0.3		16	
		0.3		17	Run
		0.2		18	
		0.1		19	
		<0.1		20	
T _C	Wetted width	<0.1		21	DO
	3.5 m	<0.1		22	8.34 ppm
	Interval	<0.1		23	91.1 %
	0.3 m	0.1		24	18.5 °C
		0.2		25	
		0.2		26	
		0.2		.	Run
		0.2		.	
		0.2		.	
		<0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Shirley Mitchell

Date: May 21, 2007

Organization: EMA, Inc.

Position: Env. Engineer

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3425 #3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _D	Wetted Width	<0.1		1 DO	
	8.0 m	0.1		2 8.64	PIDW
		0.2		3 92.7	%
		0.1		4 18.5	oc
		0.2		5	
		0.2		6	PIDW
		0.2		7	
		0.1		8	
		<0.1		9	
		<0.1		10	
T _E	Wetted Width	<0.1		11 DO	
	7.0 m	0.2		12 8.18	PIDW
	W	0.3		13 91.2	%
		0.3		14 18.1	oc
		0.3		15	
		0.3		16	PIDW
		0.2		17	
		0.2		18	
		0.1		19	
		<0.1		20	
T _F	Wetted Width	<0.1		21 DO	
	6.0 m	0.1		22 8.57	PIDW
	Interval	0.2		23 91.2	%
	0.6 m	0.3		24 18.2	oc
		0.4		25	
		0.4		26	
		0.5		27	PIDW
		0.1		.	
		<0.1		.	
		<0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: David M. LiddellDate: May 21, 2007Organization: FAE, Inc.Position: Env. Eng. Jr.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3425 #3

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
T _G	Wetted Width	<0.1		1 DO	
	7.0 m	0.6		2 8.51	DDM
		0.8		3 73.5	96
		0.8		4 18.0	92
		0.8		5	
		0.5		6 RUN	
		0.6		7	
		0.3		8	
		0.2		9	
		<0.1	<0.1	10	
T _H	Wetted Width	<0.1		11 DO	
	5.0	0.1		12 9.09	DDM
		0.2		13 96.9	96
		0.2		14 18.3	92
		0.3		15	
		0.2		16 RUN	
		0.2		17	
		0.2		18	
		0.1		19	
		<0.1		20	
T _I	Wetted Width	<0.1		21 DO	
	2.0 m	0.1		22 9.18	DDM
	Interval	0.3		23 98.3	96
		0.4		24 18.5	92
		0.4		25	
		0.3		26 RUN	
		0.3		.	
		0.2		.	
		0.2		.	
		<0.1		n	

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: David J. Smith

Date: May 21, 2007

Organization: EAS. Inc.

Position: Env. Engr

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

3425 #3

T_J

	Distance from Stream edge	Depth	Rank	Assigned Rank	Sorted depth
1	Wetted Width	<0.1		1 DO	
2	5.5 m	0.2		2 8.83	
3	Inter Val	0.3		3 96.5	
4	0.5	0.3		4 18.3	
5		0.3		5	
6		0.3		6 RUN	
7		0.3		7	
8		0.3		8	
9		0.3		9	
10		0.2		10	
1	Wetted Width	<0.1		11 DO	
2	7.5 m	0.2		12 9.60	
3	Inter Val	0.3		13 105.1	
4	0.7 m	0.3		14 12.6	
5		0.3		15	
6		0.3		16 RUN	
7		0.3		17	
8		0.3		18	
9		50.1		19	
10		50.1		20	
				21	
				22	
				23	
				24	
				25	
				26	
				.	
				.	
				.	
				n	
				.	
				.	

T_K

If there is an odd number of entries find middle rank $[(n+1)/2]$. The corresponding sorted value depth to the middle rank is the median depth.

If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Mark M. LittlefieldDate: May 21, 2007Organization: EHE, Inc.Position: Energy Engineer

Don't believe Arrow 1

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

Stream Name HOGAN'S FORK (WBID # 3425)

I. Introduction

Date & Time (include AM or PM): 4:00 pm 5-18-07

Interviewed: ☒ In person ☐ By phone ☐ By mail

(NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)

Interviewee selected because (e.g., house next to stream; standing by stream, etc.) Property
OWNER

Interviewer introduction to Interviewee: "My name is _____, I work for _____ (name of your employer), and I am collecting information on how people use _____ (name of the stream)."

ASK:

1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)

☐ Yes ☐ No

If yes, list contact information for the interviewee below:

Legal name: WALLY DZULA

Current mailing address: 986 SW 4010 RD. CHILHOWEE, MO

Daytime phone number: (660) 909-2729

E-mail address (optional):

64733

2.a.) Do you live in this area? ☒ Yes ☐ No

If yes, how many years? 7 yrs

2.b.) If you don't live nearby, are you still familiar with this stream? ☐ Yes ☐ No

If yes, how many years?

If no, thank the individual for taking the time to talk to you and conclude the interview.

3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) ☒ Yes ☐ No

If yes, proceed to "II. Personal Use?".

If no, proceed to Section V.

II. Personal Use?

1.) Have you or your family personally used the stream for recreation since November 28, 1975?

☐ Yes ☒ No

If yes, proceed to #3.

If no, proceed to #2.

2.a.) List reasons stream not used.

2.b.) Proceed to "III. Witnessed Use?".

3.) How do you use the stream?

<i>Whole Body Contact Recreation</i>			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:

4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

<i>Secondary Contact Recreation</i>				
Fishing <input type="checkbox"/>	Wading <input type="checkbox"/>	Boating <input type="checkbox"/>	Trapping <input type="checkbox"/>	Other: <input type="checkbox"/> List: _____

If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:

4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.d.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

III. Witnessed Use?

1.) Have you observed others using this stream for recreation since Nov. 28, 1975? ☐ Yes ☐ No

If yes, proceed to #2.

If no, proceed to, "IV. Anecdotal Use?".

2.) What kinds of uses have you witnessed?

<i>Whole Body Contact Recreation</i>			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

Secondary Contact Recreation

Fishing ☐ Wading ☐ Boating ☐ Trapping ☐ Other: ☐ List: _____

If Interviewee witnessed SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

IV. Anecdotal Use?

1.) Have you heard about anyone using this stream since Nov. 28, 1975 for recreation – not seen or done yourself, but just heard about it? ☐ Yes ☐ No

If yes, proceed to #2.

If no, thank the individual for taking the time to talk to you and conclude the interview.

2.) What kind of uses have you heard about?

Whole Body Contact Recreation

Swimming ☐ Tubing ☐ Snorkeling/Skin Diving ☐ Water Skiing ☐

If Interviewee heard of WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

Secondary Contact Recreation

Fishing ☐ Wading ☐ Boating ☐ Trapping ☐ Other: ☐ List: _____

If Interviewee heard of SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the* (See map requirements in the protocol). _____

V. Others to Contact?

Can you recommend someone else we could contact that knows the stream? ☐ Yes ☐ No
If yes, that person's contact info (name, address, phone, directions?) _____

If no, thank the individual for taking the time to talk to you and conclude the interview.

VI. Additional Comments

1.) From the Interviewee: _____

CALL FIRST

2.) From the Interviewer: _____

VII. Information on Interviewer

Has interviewer been trained by Missouri DNR to conduct UAA Interviews?

☐ Yes ☐ No If yes, how (check all that apply):

Workshop? (if so, enter date): _____

On-line training seminar? _____

Followed Interview Instruction Sheets? _____

Other _____

Interviewer Information:

Signature: _____

Printed Name: _____

Employer (where applicable): _____

Interviewer's phone #: _____ E-mail: _____

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

Stream Name HOGAN'S FORK (**WBID #** 3425)

I. Introduction

Date & Time (include AM or PM): _____

Interviewed: ☐ In person ☐ By phone ☐ By mail

(NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)

Interviewee selected because (e.g., house next to stream; standing by stream, etc.) PROPERTY OWNER

Interviewer introduction to Interviewee: "My name is _____, I work for _____ (name of your employer), and I am collecting information on how people use _____ (name of the stream)."

ASK:

1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)

☐ Yes ☐ No

If yes, list contact information for the interviewee below:

Legal name: DARREL HILL

Current mailing address: 365 SW 1A12 Hwy, Ch. Shawnee, MO

Daytime phone number: (660) 678-3571

E-mail address (optional):

64733

2.a.) Do you live in this area? ☒ Yes ☐ No
If yes, how many years?

2.b.) If you don't live nearby, are you still familiar with this stream? ☐ Yes ☐ No
If yes, how many years?

If no, thank the individual for taking the time to talk to you and conclude the interview.

3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) ☐ Yes ☐ No

If yes, proceed to "II. Personal Use?".

If no, proceed to Section V.

II. Personal Use?

1.) Have you or your family personally used the stream for recreation since November 28, 1975?

☐ Yes ☐ No

If yes, proceed to #3.

If no, proceed to #2.

2.a.) List reasons stream not used.

2.b.) Proceed to "III. Witnessed Use?".

3.) How do you use the stream?

Whole Body Contact Recreation			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:

4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

Secondary Contact Recreation				
Fishing <input type="checkbox"/>	Wading <input type="checkbox"/>	Boating <input type="checkbox"/>	Trapping <input type="checkbox"/>	Other: <input type="checkbox"/> List: _____

If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:

4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.d.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

III. Witnessed Use?

1.) Have you observed others using this stream for recreation since Nov. 28, 1975? ☐ Yes ☐ No

If yes, proceed to #2.

If no, proceed to, "IV. Anecdotal Use?".

2.) What kinds of uses have you witnessed?

Whole Body Contact Recreation			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

Secondary Contact Recreation

Fishing ☐ Wading ☐ Boating ☐ Trapping ☐ Other: ☐ List: _____

If Interviewee witnessed SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

IV. Anecdotal Use?

1.) Have you heard about anyone using this stream since Nov. 28, 1975 for recreation – not seen or done yourself, but just heard about it? ☐ Yes ☐ No

If yes, proceed to #2.

If no, thank the individual for taking the time to talk to you and conclude the interview.

2.) What kind of uses have you heard about?

Whole Body Contact Recreation

Swimming ☐ Tubing ☐ Snorkeling/Skin Diving ☐ Water Skiing ☐

If Interviewee heard of WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

Secondary Contact Recreation

Fishing ☐ Wading ☐ Boating ☐ Trapping ☐ Other: ☐ List: _____

If Interviewee heard of SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the* (See map requirements in the protocol). _____

V. Others to Contact?

Can you recommend someone else we could contact that knows the stream? ☐ Yes ☐ No
If yes, that person's contact info (name, address, phone, directions?) _____

If no, thank the individual for taking the time to talk to you and conclude the interview.

VI. Additional Comments

1.) From the Interviewee: _____

2.) From the Interviewer: _____

VII. Information on Interviewer

Has interviewer been trained by Missouri DNR to conduct UAA Interviews?

☐ Yes ☐ No If yes, how (check all that apply):

Workshop? (if so, enter date): _____

On-line training seminar? _____

Followed Interview Instruction Sheets? _____

Other _____

Interviewer Information:

Signature: _____

Printed Name: _____

Employer (where applicable): _____

Interviewer's phone #: _____ E-mail: _____

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

Stream Name HOGAN'S FORK (WBID # 3425)

I. Introduction

Date & Time (include AM or PM): _____

Interviewed: ☐ In person ☐ By phone ☐ By mail

(NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)

Interviewee selected because (e.g., house next to stream; standing by stream, etc.) _____
OWNS LAND AT CREEK

Interviewer introduction to Interviewee: "My name is _____, I work for _____ (name of your employer), and I am collecting information on how people use _____ (name of the stream)."

ASK:

1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)

☐ Yes ☐ No If yes, list contact information for the interviewee below:

Legal name: Thomas Dallas

Current mailing address: 996 SW 401st Rd, CHILHOWEE, ALA

Daytime phone number: (660) 678-2002

E-mail address (optional):

64733

2.a.) Do you live in this area? ☒ Yes ☐ No
If yes, how many years?

2.b.) If you don't live nearby, are you still familiar with this stream? ☐ Yes ☐ No
If yes, how many years?

If no, thank the individual for taking the time to talk to you and conclude the interview.

3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) ☒ Yes ☐ No

If yes, proceed to "II. Personal Use?".

If no, proceed to Section V.

II. Personal Use?

1.) Have you or your family personally used the stream for recreation since November 28, 1975?

☐ Yes ☐ No

If yes, proceed to #3.

If no, proceed to #2.

2.a.) List reasons stream not used.

2.b.) Proceed to "III. Witnessed Use?".

3.) How do you use the stream?

Whole Body Contact Recreation			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:

4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

Secondary Contact Recreation				
Fishing <input type="checkbox"/>	Wading <input type="checkbox"/>	Boating <input type="checkbox"/>	Trapping <input type="checkbox"/>	Other: <input type="checkbox"/> List: _____

If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:

4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

4.d.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

III. Witnessed Use?

1.) Have you observed others using this stream for recreation since Nov. 28, 1975? ☐ Yes ☐ No

If yes, proceed to #2.

If no, proceed to, "IV. Anecdotal Use?".

2.) What kinds of uses have you witnessed?

Whole Body Contact Recreation			
Swimming <input type="checkbox"/>	Tubing <input type="checkbox"/>	Snorkeling/Skin Diving <input type="checkbox"/>	Water Skiing <input type="checkbox"/>

If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

Secondary Contact Recreation

Fishing ☐ Wading ☐ Boating ☐ Trapping ☐ Other: ☐ List: _____

If Interviewee witnessed SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol). _____

IV. Anecdotal Use?

1.) Have you heard about anyone using this stream since Nov. 28, 1975 for recreation – not seen or done yourself, but just heard about it? ☐ Yes ☐ No

If yes, proceed to #2.

If no, thank the individual for taking the time to talk to you and conclude the interview.

2.) What kind of uses have you heard about?

Whole Body Contact Recreation

Swimming ☐ Tubing ☐ Snorkeling/Skin Diving ☐ Water Skiing ☐

If Interviewee heard of WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol). _____

Secondary Contact Recreation

Fishing ☐ Wading ☐ Boating ☐ Trapping ☐ Other: ☐ List: _____

If Interviewee heard of SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)? _____

2.d.) Where, exactly? Describe specific location *and mark on the* (See map requirements in the protocol). _____

V. Others to Contact?

Can you recommend someone else we could contact that knows the stream? ☐ Yes ☐ No
If yes, that person's contact info (name, address, phone, directions?) _____

If no, thank the individual for taking the time to talk to you and conclude the interview.

VI. Additional Comments

1.) From the Interviewee: _____

2.) From the Interviewer: _____

VII. Information on Interviewer

Has interviewer been trained by Missouri DNR to conduct UAA Interviews?

☐ Yes ☐ No If yes, how (check all that apply):

Workshop? (if so, enter date): _____

On-line training seminar? _____

Followed Interview Instruction Sheets? _____

Other _____

Interviewer Information:

Signature: _____

Printed Name: _____

Employer (where applicable): _____

Interviewer's phone #: _____ E-mail: _____

Memo from Alex Bartlett, BWR, 9/12/07

MDNR Comment:

West Region

#3425 - Hogan's Fork - Sites 2 & 3 map positions do not match UTM provided. UTM for Site 3 = Site 2 map location. Site 3 map location does not have corresponding UTM. Site 2 UTM does not appear on map.

Response:

#3425-Hogan's Fork Site # 1 was accessed from the road crossing of HWY 2 (just east of SW 351st Rd. – east of Chilhowee approximately two miles.) According to Google Earth, the UTM should be 38.5914, 93.8130 (42914, 4271749). Site # 2 was accessed from the road crossing of SW 401st Rd. (just south of the intersection of SW 875th Rd. and SW 401st Rd.); the UTM should be 38.6257, 93.8236 (428308, 4275564). Site # 3 was accessed from the road crossing of SW 800th Rd; the UTM should be 38.6458, -93.8143 (429136, 4277782). Because I did the fieldwork for this stream, I know the access points are correct. I'm unsure how the discrepancies with the maps and UTM's occurred, but the UTM's provided in this response should be very close to the actual site locations in the field. Attached is a hard copy of the gazetteer map I used in the field to locate road crossings for the identified stream segment. The road crossings are circled and numbered according to the site number.

Comment on Hogan's Fork (#3425)

During a phone interview for East Fork Post Oak Creek (#932), the landowner (Mark Irle) commented, "People don't seem to use Hogan's Fork. I don't know why."

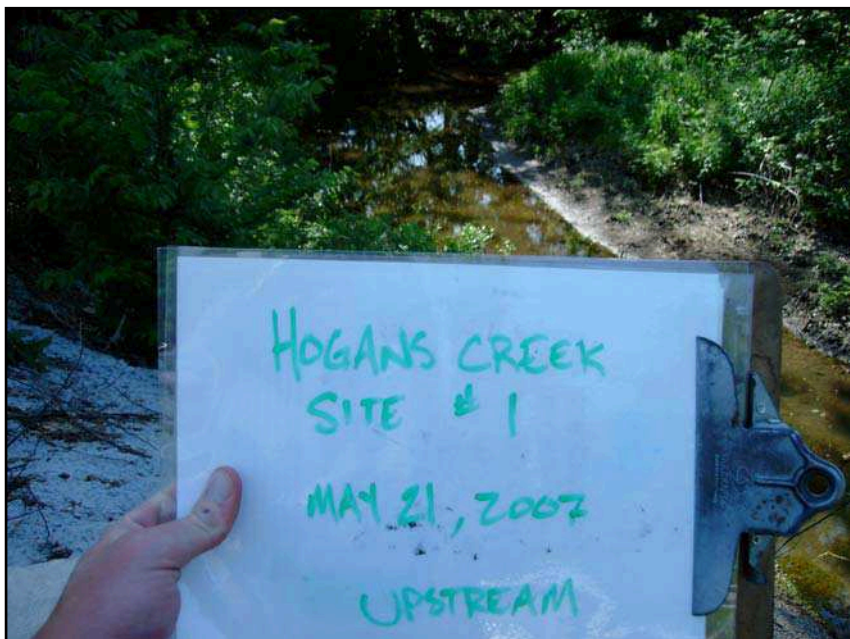
Anne Peery
March 24, 2008
12:36 p.m.



Downstream (Site #1) of Hogan's Fork.



Downstream (Site #1) of Hogan's Fork.



Upstream (Site #1) of Hogan's Fork.



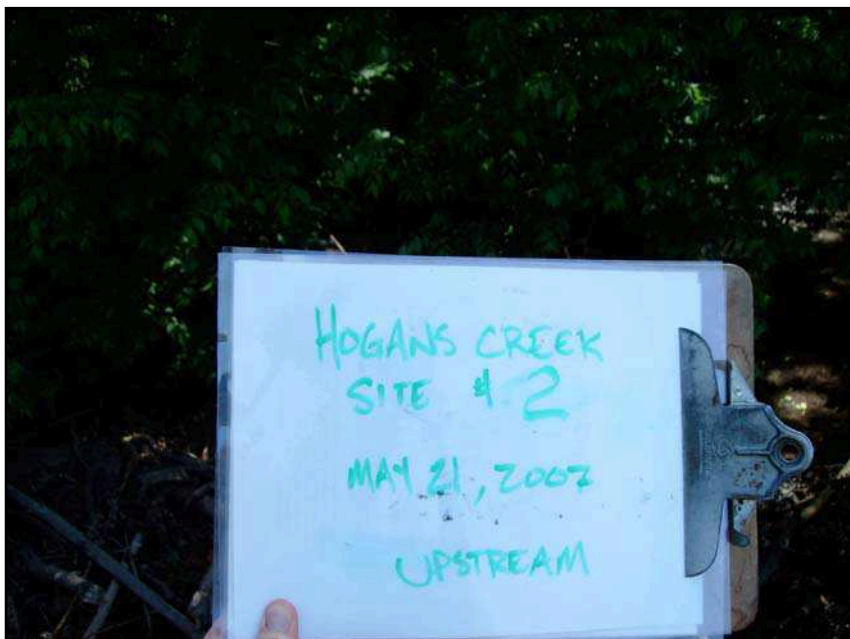
Upstream (Site #1) of Hogan's Fork.



Upstream (Site #1) of Hogan's Fork.



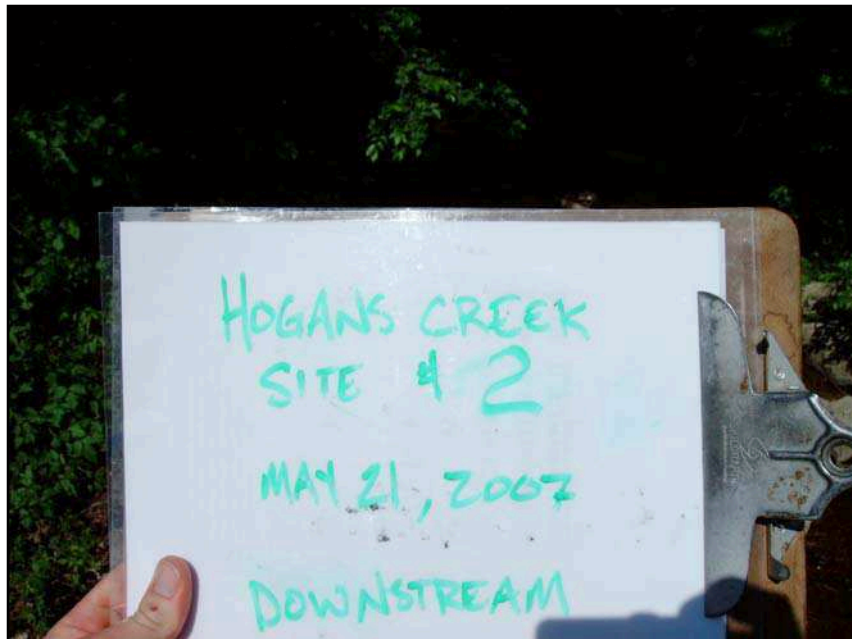
Upstream (Site #1) of Hogan's Fork.



Upstream (Site #2) of Hogan's Fork.



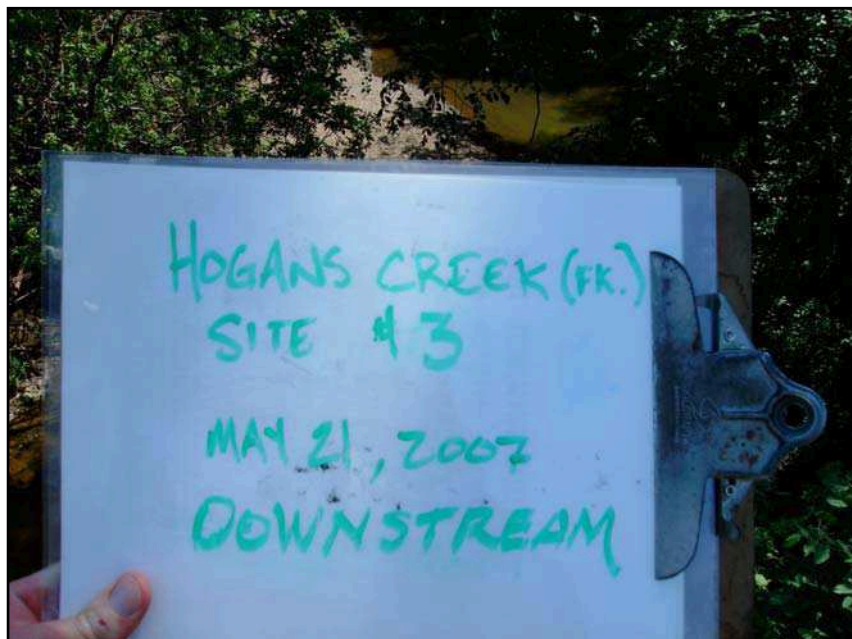
Upstream (Site #2) of Hogan's Fork.



Downstream (Site #2) of Hogan's Fork.



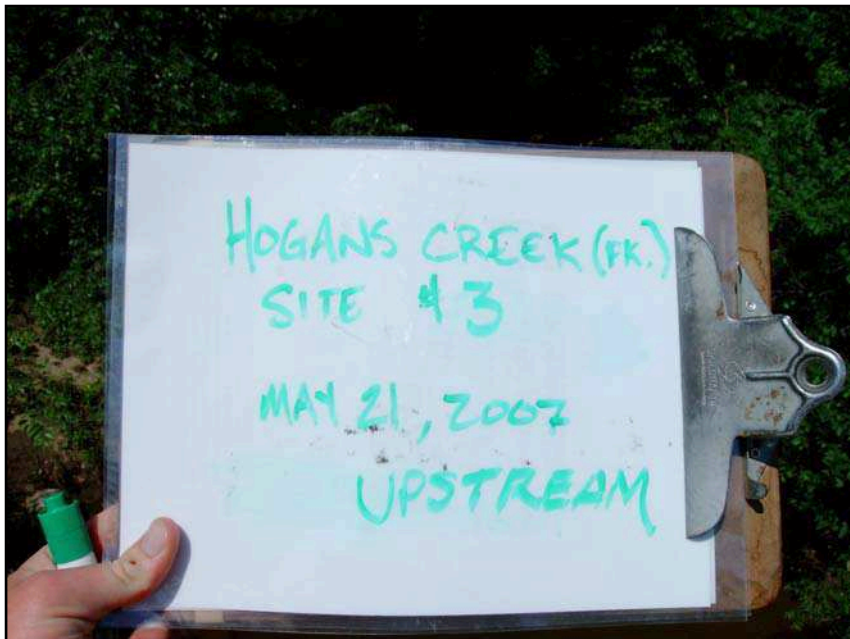
Downstream (Site #2) of Hogan's Fork.



Downstream (Site #3) of Hogan's Fork.



Downstream (Site #3) of Hogan's Fork.



Upstream (Site #3) of Hogan's Fork.



Upstream (Site #3) of Hogan's Fork.